

American Liver Foundation

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Hepatitis A, B, & C More Serious Than You Think

Hepatitis is a disease characterized by inflammation of the liver. Viral hepatitis refers to several common diseases caused by viruses that can lead to swelling and tenderness of the liver.

The most common types of viral hepatitis are hepatitis A, hepatitis B, and hepatitis C. Hepatitis B and C can lead to serious, permanent liver damage.

"A" for Awareness

Hepatitis A virus (HAV) is contracted by eating food or drinking water that has been contaminated with human feces. Symptoms usually appear 15 to 45 days following exposure to the infection. In adults, symptoms develop abruptly and are associated with fever. They may include fatigue, loss of appetite, nausea, vomiting, abdominal pain, and jaundice. Children usually have no symptoms.

The Centers for Disease Control and Prevention (CDC) estimates that 125,000 to 200,000 people in the United States are infected with hepatitis A each year. Acute hepatitis A usually resolves itself within six months and does not develop into a chronic disease. The CDC lists household or sexual contact, day care attendance or employment, and recent international travel as the major known risk factors for transmission of hepatitis A. There are also a number of states in the United States where the rates of hepatitis A are so high that childhood immunization is recommended. Infected food handlers, those using contaminated needles, and men having sex with men are also at risk for transmitting the hepatitis A virus to others.

There has been a safe and effective vaccine, which can prevent hepatitis A, since 1992 (see Prevention Is Your Best Bet).

"B" Informed

Hepatitis B virus (HBV) can cause a serious form of hepatitis. The disease is much more prevalent than HIV, the AIDS virus. The hepatitis B virus transmission is from bodily fluid exposure, which includes blood, semen, and saliva. Symptoms usually appear within 25 to 180 days following exposure. The onset of the virus is characterized by joint and muscle pain associated with non-specific fatigue, loss of appetite, nausea, and/or vomiting. Jaundice may occur in the acute phase.

Hepatitis B may develop into a chronic disease (lasting more than six months) in up to 10% of the 140,000 to 320,000 newly infected people each year. The risk of developing cirrhosis (scarring of the liver) and liver cancer is increased in untreated patients with chronic HBV. An estimated 1 to 1.25 million Americans are currently chronic carriers of HBV. Hepatitis B can lead to liver cancer, and each year an estimated 5,000 to 6,000 people die due to chronic hepatitis B liver disease.

There has been a vaccine since 1982 (see Prevention Is Your Best Bet).

"C" the Facts

Hepatitis C virus (HCV) is transmitted by exposure to an infected person's blood. The onset of the infection is often unrecognized and that is why it is often described as the "quiet virus." Some people may experience fatigue, loss of appetite, and/or nausea.

Hepatitis C develops into a chronic infection in up to 85% of the 36,000 newly infected people each year. Currently in the United States, there are approximately 4 million Americans who test positive for hepatitis C. Like chronic hepatitis B, if left untreated, the chronic form of hepatitis C has a greater chance of developing into cirrhosis, liver cancer, or even liver failure. Liver failure due to chronic hepatitis C infection is the leading cause of liver transplants in the United States. Each year an estimated 8,000 to 10,000 people die as the result of chronic hepatitis C liver disease.

There is no vaccine available.

Cause for Concern?

People who are at risk of being infected with hepatitis B or C include health care workers, people with multiple sex partners, injection drug users, those in occupations involving exposure to blood, and people with bleeding disorders (e.g., hemophilia). If you received a blood transfusion or organ transplant before 1992, you are at higher risk of being infected with hepatitis C.

Hepatitis B or C can even be transmitted by sharing toothbrushes or razors contaminated with infected blood, although these forms of transmission rarely occur. If you have a tattoo, body piercing, or are in close household contact with an infected person, you may be at higher risk of being infected. Routine screening of donated blood began in 1972 for hepatitis B and 1990 for hepatitis C.

Ninety percent of infants born to hepatitis B-infected mothers become chronically infected. Fortunately, if the mothers are identified, this can be prevented through vaccination at birth. Approximately 5% of infants born to hepatitis C-infected mothers may be infected at the time of birth and there is no known way to prevent this infection.

The following chart identifies many risk factors for hepatitis A, B, and C. It should be noted that more than 30% of hepatitis A and B cases and nearly 10% of hepatitis C cases result from unknown sources. This means that you may have been infected with one of these viruses without knowing how it occurred.

Common Routes of Transmission of Viral Hepatitis

	Α	В	С
Food or water	VVV		_
Blood transfusion	~	VV	/// *
Organ transplant	<u> </u>	~	~
Hemodialysis	_	VV	VV
Sexual intercourse (vaginal)	_	VVV	~
Anal/oral sex	VVV	///	~
Mother to child at birth	_	///	~
Casual household contact between family members	///	~	V
Injection drug use (sharing needles)	~	vv	vv
Body piercing/tattooing (contaminated needles)	_	~	V
Needlestick injuries	_	VV	~
Occupations involving exposure to blood (e.g., medical and emergency service workers)	_	V	VV
Within certain institutions: Daycare	v	~	_
Prison	~	VV	VVV



frequent common uncommon/rare not applicable before 1992

A Quiet Killer

People who are chronically infected with hepatitis B or C may have no recognizable symptoms. You can feel and appear perfectly healthy yet still be infected with the disease and infect others. In those patients who do have symptoms, they are often subtle and non-specific and may include fatigue, malaise, and pain over the area of the liver (right-hand side underneath ribs). The only way these diseases can be positively identified is through the blood tests.

You may be at risk if you have been exposed to any of the risk factors on the chart on the previous page. Even if you are in doubt, <u>GET TESTED!</u>
It is important to consult with a physician.

Testing 1...2...3...

If, during a routine physical examination, your physician tells you that you have an "elevated ALT test" or "raised liver enzymes," he/she will recommend further testing, as this may be a sign of hepatitis or other liver diseases.

- There are specific tests your doctor can do to identify hepatitis A, B, and C
- Hepatitis A tests can be used to distinguish recent infection from immunity to the virus due to a prior infection
- The tests for hepatitis B (there are several) can identify: (a) whether you are infected, (b) if you are recovering from the disease, (c) if you have a chronic infection, or (d) if you are immune to hepatitis B

• The tests for hepatitis C can show if you are infected with the virus or if you were infected in the past. It should also be noted that currently there is a home test for hepatitis C that can be purchased without a prescription at your local drugstore

Getting tested is important because treatment options today are more effective than ever. If you do test positive for hepatitis B or C, there are treatment options available for many patients that may be helpful. So, if you think you may be infected, be sure to consult your physician.

Pievention is Your Best Bet

Hepatitis *can* be avoided. You should always practice safe sex and never share objects that offer the potential of blood-to-blood contact such as needles, razors, and toothbrushes. When getting a tattoo or body piercing, make sure sterile instruments are used. Those who may be exposed to blood in their workplace, such as health care workers, laboratory technicians, dentists, surgeons, nurses, emergency service workers, police officers, firefighters, paramedics, military personnel, or those who live with an infected individual should be vaccinated against hepatitis B.

It is also important that infants, adolescents, young adults, and patients infected with hepatitis C be vaccinated against hepatitis B. You should be vaccinated against hepatitis A if you have chronic liver disease, work at a day care center, come into close contact with someone who is infected, travel to areas that have poor sanitation, or live in a state where there is a high rate of

hepatitis infection. If you live in one of these states, your children should also be vaccinated against hepatitis A. For a list of those states, call (888) 4HEP-ABC.

Don't Stop Here

If you need more information about hepatitis, ask your doctor, nurse, or pharmacist. You can also contact the American Liver Foundation (ALF) at 1-888-4HEP-ABC. The ALF is a nonprofit national voluntary health organization dedicated to preventing, treating, and curing hepatitis and other liver diseases through research, education, and advocacy.

American Liver Foundation



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